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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/700,278	11/13/2000	Michael Reggelin	147/49227	2959

7590

07/12/2002

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EXAMINER

HUANG, EVELYN MEI

ART UNIT

PAPER NUMBER

1625

DATE MAILED: 07/12/2002

9

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/700,278

Applicant(s)

REGGELIN ET AL.

Examiner

Evelyn Huang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 May 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 17-25, 27-29 and 31-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 17-25, 27-29 and 31-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

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1. Claims 17-25, 27-29, 31-33 are pending. Claims 1-16 have been canceled according to the preliminary amendment filed on 11-13-2000. Claims 26, 30 have been canceled according to the amendment filed on 5-14-2002.

Claim Rejections - 35 USC § 112

2. The 35 U.S.C. 112 second paragraph rejection is withdrawn because the amendment has obviated the rejection.

Claim Rejections - 35 USC § 102

3. The 35 U.S.C. 102(a) rejection for claim 27 over Bolte (PTO-1449) is maintained for reasons for record.

Applicant submits that Bolte has not specifically described the method of making the compound. However, the process of making the compound is well known in the art as described for the analogous tetrahydrofurans (Reggelin, Liebigs Ann/Recueil 1997, 181-1886, PTO-1449). Bolte therefore contains an “enabling disclosure” since the public was in possession of the claimed invention before the date of invention. “Such possession is effected if one of ordinary skill in the art could have combined the publication's description of the invention with his [or her] own knowledge to make the claimed invention.” In re Donohue, 766 F.2d 531, 226 USPQ 619 (Fed. Cir. 1985). See MPEP 2121.

Claim Rejections - 35 USC § 103

4. The 35 U.S.C. 103(a) rejection for Claims 27-28 over Bolte (PTO-1449) in view of Greene is maintained for reasons of record.

Applicant submits that Bolte has not specifically described the method of making the compound. However, the process of making the compound is well known in the art as described for the analogous tetrahydrofurans (Reggelin, Liebigs Ann/Recueil 1997, 181-1886, PTO-1449). Bolte therefore contains an “enabling disclosure” since the public was in possession of the

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claimed invention before the date of invention. "Such possession is effected if one of ordinary skill in the art could have combined the publication's description of the invention with his [or her] own knowledge to make the claimed invention." In re Donohue, 766 F.2d 531, 226 USPQ 619 (Fed. Cir. 1985). See MPEP 2121.

5. The 35 U.S.C. 103(a) rejection for Claims 17-25, 31-33 over Lash (J. Het. Chem. 1991, PTO-1449) and Reggeline I (Liebigs Ann/Recueil, 1997, PTO-1449) and Reggeline II (J. Am. Chem. Soc. 1996) and Bolte (PTO-1449) in view of Greene is withdrawn in view of the amendment and applicant's remarks, but is subjected to the following new rejection.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 17-25, 31-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chu (5252747) and Reggeline I (Liebigs Ann/Recueil, 1997, PTO-1449) and Reggeline II (J. Am. Chem. Soc. 1996) and Bolte (PTO-1449) in view of Greene.

Chu describes a compound of instant formula Ia' (column 1, formula VI; column 5, compound 9):

While Chu does not teach the instant process, Reggeline I teaches the instant stereoselective synthesis with a metallated 2-alkenyl sulfoximines intermediate (page 1883, Table 1), followed by reductive elimination of the sulfur moiety from the S-aminooxosulfonium intermediate for the preparation of a tetrahydrofuranyl compound (Reggeline II, column 1, scheme 17 ; Removal of the Auxillary), which is structurally analogous to the instant pyrrolidinyl compound. The instant pyrrolidinyl intermediate compound is described by Bolte (see paragraphs 3, 4 above).

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At the time of the invention, guided by the combined teachings of the prior art, one of ordinary skill in the art would be motivated to prepare Chu's compound by the alternative process of Reggelin I and II using the corresponding intermediate compound as described by Bolte to arrive at the instant invention with the reasonable expectation of obtaining a more efficient process for the stereochemically controlled preparation of an isomerically pure substituted azacyclic compound. To one of ordinary skill in the art, the preparation of a known compound employing known or obvious starting materials via a known or obvious process is *prima facie* obvious in the absence of unexpected results.

While the above references do not specifically disclose the amino-protecting fluoren-9-yl-methoxy-carbonyl as in the instant claim 20, or the hydroxy-protecting trimethylsilyl of the instant claim 25, Greene expressly teaches these protecting groups (page 309, 2.; page 318; page 12, 72.; page 68).

At the time of the invention, one of ordinary skill in the art would be motivated to temporarily blocked the other reactive sites employing the art-known protecting group as taught by Greene to ensure the selective reaction at the desired reactive site.

Claim Rejections - 35 USC § 112

7. The 35 U.S.C. 112, first paragraph rejection is withdrawn upon reconsideration in view of the amendment and applicant's remarks. The scope of the claims is now commensurate with that of the objective enablement.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Evelyn Huang whose telephone number is 703-305-7247. The examiner can normally be reached on Tuesday-Friday.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alan Rotman can be reached on 703-308-4698. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-4556 for regular communications and 703-308-4556 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1235.



Evelyn Huang

Primary Examiner

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July 2, 2002